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Oribatids from Brunei III (Acari: Oribatida). (*Acarologica Genavensia* XCI)

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Oribatids from Brunei III (Acari: Oribatida). (*Acarologica Genavensia* XCI). – Thirty oribatid species are listed from Brunei; fourteen are new to science. Four new genera are established, one of them (*Luxtonia* gen. n.) also represents a new family (Luxtoniidae fam. n.) in the superfamily Oppioidea and the other three (*Bruneibelba* gen. n., *Coartobelba* gen. n., *Condylobelba* gen. n.) belong to the family Suctobelbidae. From the following genera new species are described: *Teraja* (1 sp. n.), *Eremobelba* (1 sp. n.), *Luxtonia* (1 sp. n.), *Arcoppia* (1 sp. n.), *Corynoppia* (1 sp. n.), *Karenella* (1 sp. n.), *Ptiloppia* (1 sp. n.), *Senectoppia* (1 sp. n.), *Bruneibelba* (2 spp. n.), *Coartobelba* (1 sp. n.), Condylobelba (3 spp. n.). A new combination is proposed: *Coartobelba campestris* (Balogh & Mahunka) comb. n. = *Suctobelba campestris* Balogh & Mahunka, 1981.

Key-words: Acari - Oribatida - taxonomy - new species, new genera, new family - Brunei.

INTRODUCTION

So far, I have published two papers discussing the oribatid fauna of Brunei (Mahunka, 1995, 1997). The very rich material collected by Dr. Bernd Hauser, former Head of the Arthropod Department of the Muséum d'histoire naturelle, Geneva, during his 1988 expedition to Brunei, organized together with Dr. Charles Lienhard, Research Officer at the same Department, contains numerous taxonomical novelties. The examination of the material was completed in 1996 due to the support of the Geneva Museum.

As I have already done when working on material from Sabah (Mahunka, 2000), i.e. I concentrated on one superfamily, the Oppioidea. In the course of selecting the material, however, I came across several highly interesting taxa belonging to other superfamilies, which I am treating here too.

The composition of the superfamily Oppioidea Grandjean, 1951, as well as its relationships, are still under heated debate and in recent years there have been many changes and modifications. For instance, Woas (1986) has completely rejected the concept of Balogh (1983) regarding genera and subfamilies. The same happened to

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the classification proposed by Subias & Balogh (1989), which is in fact an improved version of Balogh's system. Later Woas modified his original concept (Franklin & Woas, 1992) and gave new diagnoses and new evaluations, but basically his concept still strongly differs from that of other authors. Without doubt Woas's system comes far closer to a true phylogenetic classification than any other system proposed up to now. However, in practical work the lack of an easy survey makes progress highly difficult. I must confess that my opinion is much closer to Balogh's than to Woas's, because I am convinced that a profound knowledge of forms on world-wide material may in many cases substitute even basic phylogenetic analyses in establishing inherent relationships.

When describing species, I use morphological terms already applied in some of my earlier works (e.g. Mahunka, 1996).

LIST OF LOCALITIES

Bru-88/12: **Brunei** (Brunei-Muara District): près du pont sur le ruisseau "Sungai Lubang Barus" sur la route venant de Tutong, à 33 km de Bandar Seri Begawan, prélèvement de sol dans les angles formés par les contreforts de deux grands arbres proches des habitations, env. 20m; 16.Xl.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/21: **Brunei** (Belait District): "Andulau Forest Reserve", à 3.5 km S de Sungai Liang (= à 39,5 km de Labi), forêt primaire ("Mixed dipterocarp forest"), "Kompartment 7" (= K-7), prélèvement de sol dans les angles formés par les contreforts de grands arbres, 50m; 19.Xl.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/24: **Brunei** (Brunei-Muara District): "Berakas Forest Reserve" N de Bandar Seri Begawan sur la route, à 19.5 km de Muara (= à 102.5 km de Kuala Belait), forêt "Kerangas" (= "Tropical heath forest"), prélèvement de sol au pied de *Casuarina nobilis* Whitmore (Casuarinaceae), 30m; 20.XI.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/29: **Brunei** (Belait District): Sungai Liang, "Arboretum Forest Reserve", forêt primaire ("Mixed dipterocarp forest"), prélèvement de sol dans les angles formés par les contreforts de deux arbres appelés "Nyatho", 90m; 21.Xl.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/32: **Brunei** (Belait District): "Labi Hills Forest Reserve", "Teraja", à 42 km S de Sungai Liang (= 12 km au Sud de Labi), environs de "Rumah Panjang" (= Longhouse du Kampong Teraja), forêt primaire ("Mixed dipterocarp forest"), prélèvement de sol dans les angles formés par les contreforts d'un très grand arbre, 40m; 22.Xl.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/35: **Brunei** (Belait District): "Badas Forest Reserve", à env. 10 km sur la route secondaire qui bifurque, à 32 km de Kuala Belait, vers S, forêt "Kerangas" (= "Tropical heath forest") formée presque exclusivement par *Agathis dammara* (Lambert) L. G. Rich. (Araucariaceae), prélèvement de sol au pied de *Agathis dammara*, 10m; 23.XI.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/38: **Brunei** (Temburong District): "Peradayan Forest Reserve" (= "Bukit Patoi"), à 14.5 km de Bangar (= 2.5 km de Labu), forêt primaire ("Mixed dipterocarp forest"), prélèvement de sol dans les angles formés par les contreforts de grands arbres morts, 80m; 24.Xl.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/41: **Brunei** (Belait District): Sungai Liang, "Arboretum Forest Reserve", forêt primaire ("Mixed dipterocarp forest"), prélèvement de sol dans les angles formés par les contreforts d'arbres appelés "Kempas" (= *Koompassia malaccensis* Maing. & Benth. [Fabaceae), 20m; 25.XI.1988; leg. B. Hauser – (extraction par appareil Berlese).

Bru-88/46: **Brunei** (Belait District): "Andulau Forest Reserve", à 3.5 km S de Sungai Liang (= à 39.5 km de Labi), forêt primaire ("Mixed dipterocarp forest"), "Kompartment 8" (= K-8), prélèvement de sol dans les angles formés par les contreforts d'un grand arbre, 70m; 26.XI.1988; leg. B. Hauser – (extraction par appareil Berlese).

LIST OF IDENTIFIED SPECIES

Synichotritiidae Walker, 1965

Sabahtritia lienhardi Mahunka, 1995
Locality: Bru-88/32: 1 specimen.
Distribution: Brunei (hitherto known from the type locality only); second record for Brunei.

Temburongiidae Mahunka, 1990

Temburongia patoi Mahunka, 1990
Localities: Bru-88/29: 35 specimens; Bru-88/38: 8 specimens.
Distribution: Sarawak, Brunei; second record for Brunei.

Microzetidae Grandjean, 1936

Teraja tuberculata (Mahunka, 1987)
Locality: Bru-88/35: 2 specimens.
Distribution: Sarawak (hitherto known from the type locality only); first record for Brunei.

Teraja asymmetrica sp. n.
Locality: Bru-88/38.

Teraja sungai Mahunka, 1997
Locality: Bru-88/35: 2 specimens.
Distribution: Brunei (hitherto known from the type series only); second record for Brunei.

Teraja wongi Mahunka, 1995
Locality: Bru-88/32: 2 specimens.
Distribution: Brunei (hitherto known from the type locality only); second record for Brunei.

Damaeolidae Grandjean, 1965

Fosseremus laciniatus (Berlese, 1905)
Locality: Bru-88/12: 2 specimens.
Distribution: Cosmopolitan; first record for Brunei.

Eremobelbidae Balogh, 1961

Eremobelba porcella sp. n.
Localities: Bru-88/21, Bru-88/24.

Peloppiidae Balogh, 1943

Austroceratoppia serapi Mahunka, 1996
Locality: Bru-88/29: 2 specimens.
Distribution: Sarawak (hitherto known from the type series only); first record for Brunei.

Carabodidae C. L. Koch, 1837

Gymnobodes semengok Mahunka, 1996
Locality: Bru-88/35: 3 specimens.
Distribution: Sarawak (hitherto known from the type series only); first record for Brunei.

Hardybodes penicillatus Mahunka, 1995
Locality: Bru-88/24: 1 specimen.
Distribution: Brunei (hitherto known from the type locality only); second record for Brunei.

Tectocepheidae Grandjean, 1954

Tegeozetes tunicatus Berlese, 1913
Localities: Bru-88/32: 2 specimens; Bru-88/38: 2 specimens.
Distribution: Circumtropical; first record for Brunei.

Otocepheidae Balogh, 1961

Dolicheremaeus andulauensis Mahunka, 1995
Locality: Bru-88/24: 5 specimens.
Distribution: Brunei (hitherto known from the type series only); second record.

Luxtoniidae fam. n.

Luxtonia hauseri gen. n., sp. n.
Locality: Bru-88/35.

Oppiidae Grandjean, 1951

Arcoppia teraja sp. n.
Localities: Bru-88/21; Bru-88/32.

Corynoppia andulau sp. n.
Locality: Bru-88/21.

Graptoppia sundensis (Hammer, 1980)
Localities: Bru-88/21: 17 specimens; Bru-88/35: 5 specimens.
Distribution: Java, Sabah; first record for Brunei.

Karenella bruneiana sp. n.
Localities: Bru-88/21; Bru-88/46.

Oppiella nova (Oudemans, 1902)
Localities: Bru-88/24: 3 specimens; Bru-88/32: 6 specimens; Bru-88/35: 6 specimens.
Distribution: Cosmopolitan; first record for Brunei.

Ptiloppia lienhardi sp. n.
Localities: Bru-88/21; Bru-88/32; Bru-88/35.

Pulchroppia burckhardti Mahunka, 1987
Locality: Bru-88/35: 4 specimens.
Distribution: Sabah (hitherto known from the type locality only); first record for Brunei.

Senectoppia kerangas sp. n.
Locality: Bru-88/32.

Suctobelbidae Jacot, 1938

Bruneibelba separata gen. n., sp. n.
Localities: Bru-88/21, Bru-88/35

Bruneibelba tuberosa sp. n.
Locality: Bru-88/35

Coartobelba pauper gen. n., sp. n.
Localities: Bru-88/21; Bru-88/29; Bru-88/41; Bru-88/46.

Suctobelbella subcomplexa (Balogh & Mahunka, 1968)
Localities: Bru-88/21: 2 specimens; Bru-88/41: 1 specimen.
Distribution: Argentina (hitherto known from the type locality only); first record for Brunei and Asia.

Suctobelbella variosetosa (Hammer, 1961)
Localities: Bru-88/35: 2 specimens; Bru-88/38: 1 specimen; Bru-88/46: 2 specimens.
Distribution: Widely distributed in the Oriental and Neotropical Region; first record for Brunei.

Condylobelba agathis gen. n., sp. n.
Localities: Bru-88/21; Bru-88/29; Bru-88/35; Bru-88/46.

Condylobelba bruneiensis sp. n.
Localities: Bru-88/21; Bru-88/24; Bru-88/29; Bru-88/35; Bru-88/41; Bru-88/46.

Condylobelba sculpturata sp. n.
Locality: Bru-88/35.

Oribatellidae Jacot, 1925

Lamellobates orientalis Csiszár, 1961
Locality: Bru-88/35: 2 specimens.
Distribution: Java, Bali, Sabah, Philippines; first record for Brunei.

Galumnidae Jacot, 1925

Notogalumna praetiosa Sellnick, 1959
Locality: Bru-88/24: 1 specimen.
Distribution: Polynesia: Raivavae, Raiatea (hitherto known from the type series only); first record for Brunei.

DESCRIPTIONS OF NEW TAXA

Teraja asymmetrica sp. n. Figs 1-3

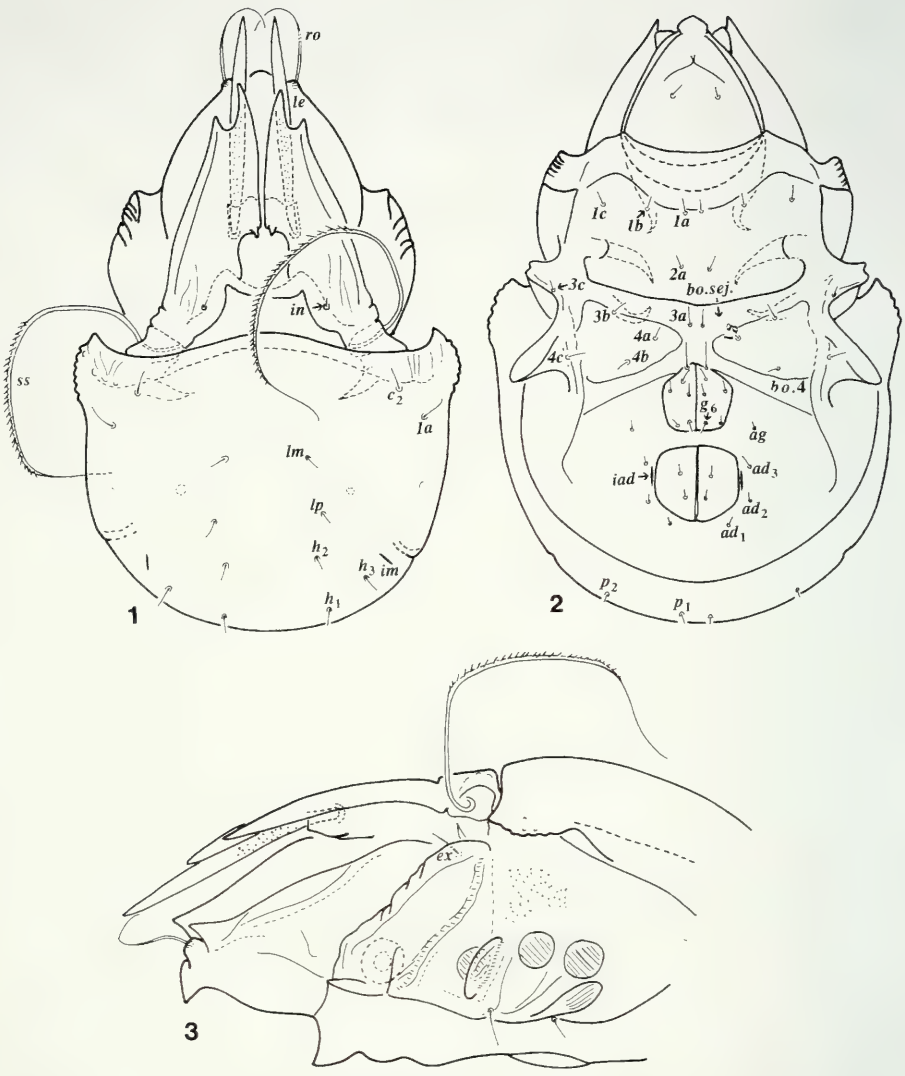
Material examined: Brunei: Holotype: Bru-88/38, 1 paratype from the same sample. Holotype: MHNG[1], paratype (1571-PO-96): HNHM[2].

Measurements: Length of body: 186-191 µm; width of body: 133-142 µm.

Prodorsum: Rostral part of prodorsum appearing straight in dorsal view, a short nasiform median apex and the two tubercles of the rostral setae protruding from

[1] MHNG = deposited in the Muséum d'histoire naturelle, Geneva.

[2] HNHM = deposited in the Hungarian Natural History Museum, Budapest, with indentification number of the specimen in the Collection of Arachnida.



FIGS 1-3

Teraja asymmetrica sp. n. - 1: body in dorsal view, 2: body in ventral view, 3: podosoma in lateral view.

it. Rostral apex beak-shaped in lateral view (Fig. 3). Lamellar apices asymmetrical, the outer one shorter, the inner one much longer with a sharp basal spur anterior to narrowing part basally. A well framed basal hollow present, as typical for the genus. Lamellar setae very thick, long, conspicuously spiculate in their basal part, arising from a thickening under the lamellae. Rostral setae long, flagellate, interlamellar setae minute. Sensilli very long, directed outwards and backwards, unilaterally ciliate (Fig. 3).

Notogaster: Its surface slightly undulate. Dorsosejugal suture convex. Pteromorphae small, their surface rugose, with some tubercles (Fig. 1). Nine pairs of simple, straight notogastral setae present.

Lateral part of podosoma: Tutorium with sharp, triangular apex, rostral setae arising on tubercles close to it. Pedotecta I very large with rugose dorsal margin. Pedotecta II-III and discidium also with mostly parallel rugae.

Ventral region: Typical for the genus, epimeral borders characteristically X-shaped (Fig. 2). All epimeral setae short and simple. Anogenital setal formula: 6 - 1 - 2 - 3. Anterior genital setae strikingly longer than the others.

Legs: Typical for the family.

Remarks: The species of the genus *Teraja* Mahunka, 1995 were surveyed by Mahunka (1997). The new species is close to *T. tuberculatus* (Mahunka, 1987) and *T. sungai* Mahunka, 1997. However, both these species have nearly symmetrical lamellar apices and the size of their lamellar setae is different from those of *T. asymmetrica* sp. n.

Derivatio nominis: Named after the form of the lamellar cusps.

Eremobelba porcella sp. n. Figs 4-7

Material examined: Brunei: Holotype: Bru-88/24, 8 paratypes from the same sample; 2 paratypes: Bru-88/21. Holotype and 7 paratypes: MHNG, 3 paratypes (1572-PO-96): HNHM.

Measurements: Length of body: 262-283 µm; width of body: 153-174 µm.

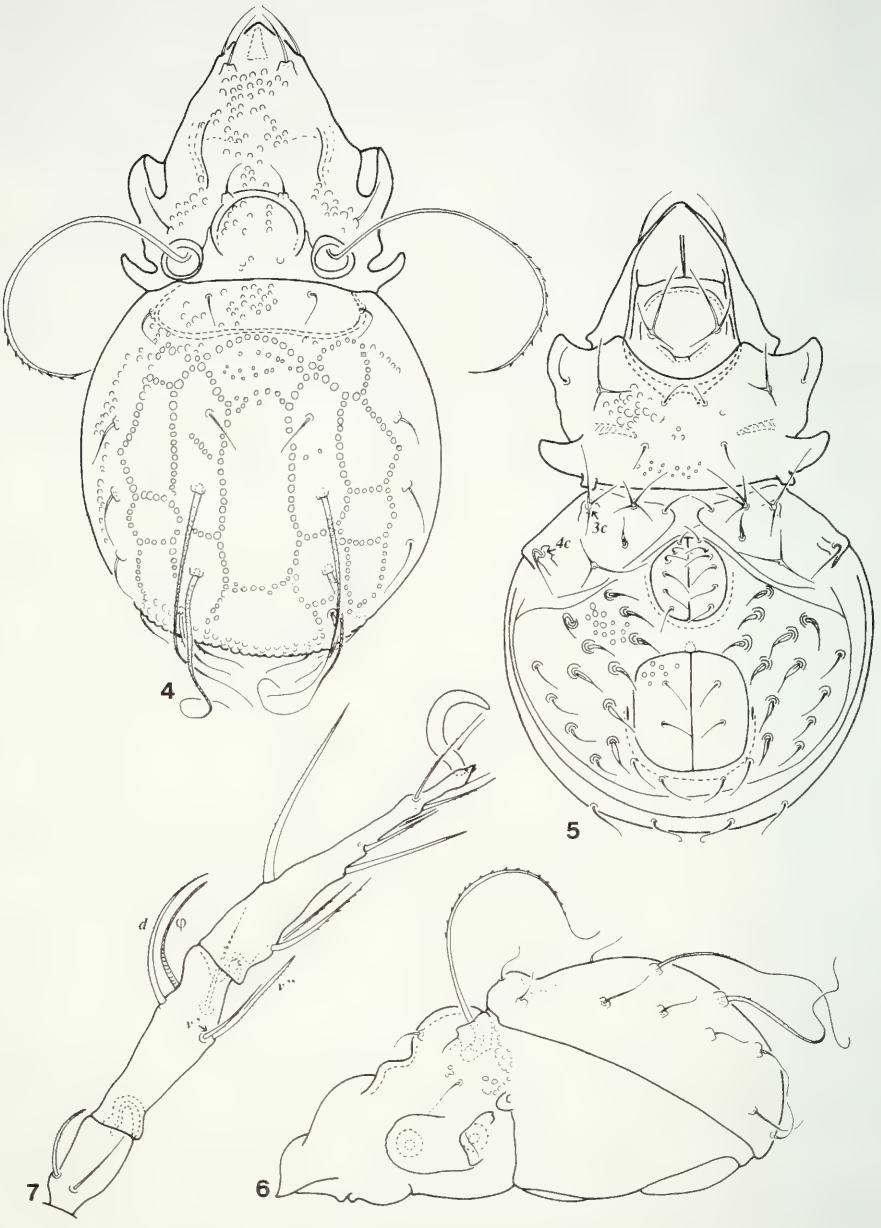
Integument: The whole body covered by a thick cerotegument layer; its cerotegument granules arranged in a polygonal pattern as typical for most species of this genus. Median field a narrow rectangle, all others divided by transversal lines of granules (Fig. 4).

Prodorsum: Lamellar and interlamellar setae arising on strong tubercles, the former far from each other, the latter arising medially on semicircular laths. All setae simple. Sensilli very long, the serrated marginal velum fine.

Notogaster: Eleven pairs of notogastral setae present, their length characteristically varying: two median pairs much longer than the others (Fig. 6). All setae slightly roughened.

Lateral part of podosoma: The structure of the prodorsum conspicuous (Fig. 6). Pedotecta I very large, rounded anteriorly.

Ventral region: Mentum with two conspicuously arched laths. Epimeral setal formula: 3 - 1 - 3 - 3. Some setae (*1b*, *3b*, *3c*, *4b*) stellate. Setae *3c* and *4c* arising on strong tubercles. On the ventral plate arise 15 (sometimes 14) pairs of setae, the marginal ones simple and fine, the others phylliform.



FIGS 4-7

Eremobelba porcella sp. n. - 4: body in dorsal view, 5: body in ventral view, 6: body in lateral view, 7: genu, tibia and tarsus of leg IV.

Legs: Claws of leg I much smaller and longer than those of legs II-IV. Seta *v''* much longer than *v'*, seta *d* slightly longer than the solenidion on leg IV (Fig. 7).

Remarks: The new species is closely related to *Eremobelba heterotricha* Mahunka, 1977, described from Malaysia, for which I give some corrections of the description after re-examination of the type series[3]. The two species are distinguished by the following characters:

E. heterotricha Mahunka, 1977	*E. porcella* sp. n.
1. Body large: 340-358 µm x 193-210 µm.	1. Body small: 262-283 µm x 153-174 µm.
2. Median field nearly twice as long as the one beside it.	2. Median field narrow, only slightly broader than the one beside it.
3. Second longitudinal field undivided.	3. Second longitudinal field divided by transversal rows of granules.
4. Mentum without any thickenings (arched laths).	4. Mentum bearing strong arched laths.

Derivatio nominis: Named after the snout-like structure in the interlamellar region. Noun in apposition.

Luxtonia gen. n.

Diagnosis: Belonging to the superfamily Oppioidea Grandjean, 1951. Rostrum undivided, rostral setae widened, with robust spines unilaterally. Head of sensilli dilated, bearing spines on their dorsal surface. Costula and crista absent, only a nearly U-shaped lath observable in interlamellar position. Dorsosejugal suture convex medially, reaching forwards between bothridia. Ten pairs of notogastral setae, 5 pairs of lyrifissures and glandular openings present. Setae c_2 penicillate. Coxisternal region well sclerotized, epimeral borders well developed. Epimeral setal formula: 3 - 1 - 3 - 3, these setae partly penicillate or stellate. Ventral plate with a pair of strong tubercles in the aggenital region and with an enigmatic saccular structure on its postanal surface. Anogenital setal formula: 5 - 1 - 2 - 3. The position of adanal setae unique in the superfamily. All leg segments normal, none of the elongated type. Leg setal formula (see below) also typical for the superfamily.

Type species: *Luxtonia hauseri* sp. n.

Remarks: The characteristics given in the generic diagnosis differ from those already known among oppioid taxa, like the position of the adanal setae, the structure of the coxisternum, the shape of the epimeral setae. The chaetotaxy of legs also displays characteristic features (ω_2 of tarsus I arising behind ϵ, ω_1 of tarsus II on the basis of the segment).

[3] I studied again the type specimens of this species. The main characters were well illustrated in the original description, but the interlamellar setae are nearly smooth, a superfluous pair of setae was figured on the epimeral region and the setae *4b* were figured as simple, whereas they are stellate. The body size is much smaller than given in the description.

Derivatio nominis: I dedicate the new genus (and family) to Dr. Malcolm Luxton (Cardiff, U. K.), the renowned oribatidologist, with thanks for his continuous help in reviewing my manuscripts. The new genus is female in gender.

Luxtoniidae fam. n.

Diagnosis: Belonging to the superfamily Oppioidea Grandjean,1951. Typical oppioid habitus. Posterior margin of notogaster divided, two lobes covering each other and connecting with an enigmatic saccular structure on the postanal surface of the ventral plate. Epimeral region well sclerotized, its unique structure characteristic. Discidium and a part of epimeral region tuberculate. Some of epimeral setae stellate or penicillate. The size of legs normal, but the position of some solenidia are characteristic (ω_2 of tarsus I arising behind ϵ, ω_1 of tarsus II on the basis of the segment).

Type genus: *Luxtonia* gen. n.

Remarks: The posteromarginal border of the notogaster is divided into overlapping lobes in the new taxon. Furthermore, the extraordinary postanal structure also makes it very different from all the other oppioid species. The strong tubercle on the ventral plate also differs from those of known forms. For these reasons, I find it justified to establish a new family within the superfamily Oppioidea Grandjean, 1951.

Luxtonia hauseri sp. n. Figs 8-14

Material examined: Brunei: Holotype: Bru-88/35, 9 paratypes: from the same sample. Holotype and 6 paratypes: MHNG, 3 paratypes (1573-PO-96): HNHM.

Measurements: Length of body: 232-253 µm; width of body: 114-149 µm.

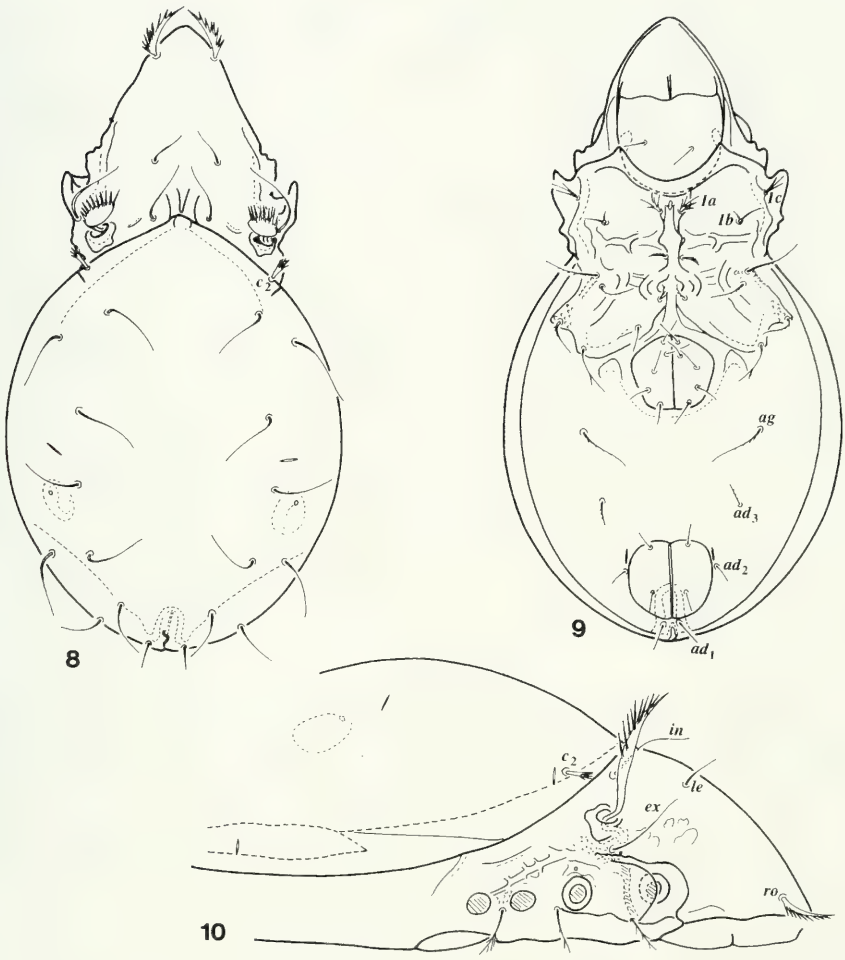
Integument: Cerotegument layer not observable.

Prodorsum: Rostral apex simply rounded. True costulae absent, but between the interlamellar setae a short, comparatively wide, furcate lath present basally and medially. Some irregular fields observable laterally and a pair of stronger ones medially. Rostral setae dilated, with very robust, spiniform cilia; other prodorsal setae smooth, their ratio: *ex* > *in* > *ro* > *le* (Fig. 10). Sensilli comparatively short, gradually thickened distally, with 10 long, bacilliform branches.

Notogaster: Crista absent. Dorsosejugal suture protruding forwards between bothridia. Posterior margin divided as shown in Fig. 14. Ten pairs of notogastral setae present, setae c_2 short, penicillate. All other setae simple, setiform, nearly smooth, setae p_1 and p_2 shorter than the others. Also five pairs of lyrifissures present, their position shown in Fig. 11.

Lateral part of podosoma: Well sclerotized, exobothridial region partly granulated, some longitudinal crests present, primarily a very strong one running over the acetabula of legs II and III posteriorly (Fig. 10). Pedotecta I small, rounded anteriorly, pedotecta II-III absent.

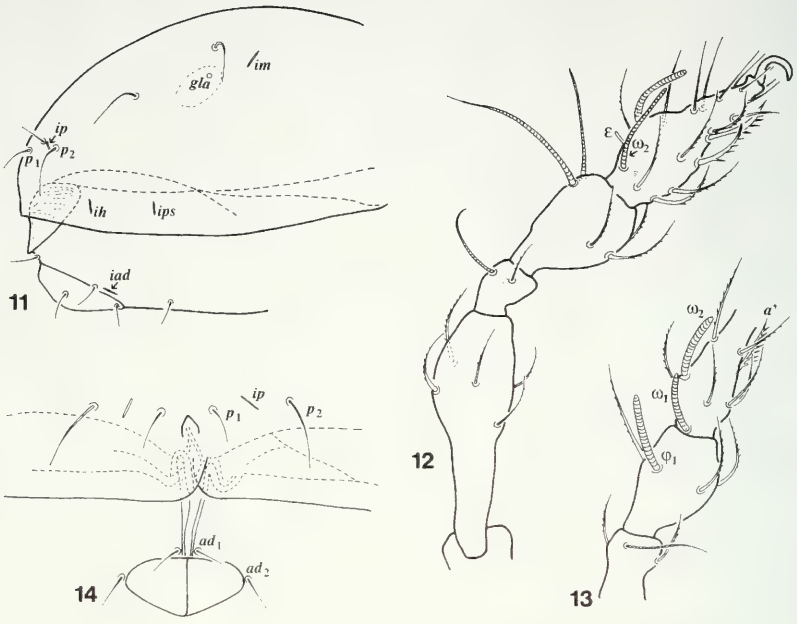
Coxisternal region: All epimeral borders (except *bo.* 3) well sclerotized, *bo.* 4 partly tuberculated. Some ponticular-like structures and longitudinal crests also observable on the borders, or on the epimeral surface, the latter medially with some concave structure. Epimeral setal formula: 3 - 1 - 3 - 3. Setae on epimere 1 stellate and/or penicillate. The other epimeral setae with long cilia.



FIGS 8-10

Luxtonia hauseri gen. n, sp. n. - 8: body in dorsal view, 9: body in ventral view, 10: body in lateral view.

Anogenital region: There is an unclear fissure with a saccular structure attached to it, at the posterior margin of the ventral plate. Its inner structure and its function unknown. Genital plates with 5 pairs of simple, comparatively long setae, all of the same length. Aggenital setae conspicuously ciliate and long, much longer than the other setae on the ventral plate. Two pairs of anal and three pairs of adanal setae present, setae ad_1 and ad_2 in a unique position, very near to the anal aperture. Lyrifissures *iad* also in apoanal position, in front of the insertion of setae ad_2.



FIGS 11-14

Luxtonia hauseri gen. n., sp. n. - 11: posterior part of the notogaster in lateral view 12: leg I, 13: genu, tibia and the basal part of tarsus of leg II, 14: posterior margin of the notogaster in posterior view.

Legs: Claws of all tarsi simple, calyciform. Leg setal formula characteristic:

1: 1 - 5 - 3+1 - 4+1 - 20+2 - 1 (Fig. 12)
IV: 1 - 2 - 2 - 3+1 - 10 - 1

Eupathidium ε and solenidium ω_2 on tarsus I located behind seta *ft*"(Fig. 12). Solenidion ω_1 of tarsus II originating on the basal surface. Solenidia ω_1 and ω_2 of tibia I short but dilated (Fig. 13). Setae *a*' of tarsus II very strong, dilated with spiniform branches.

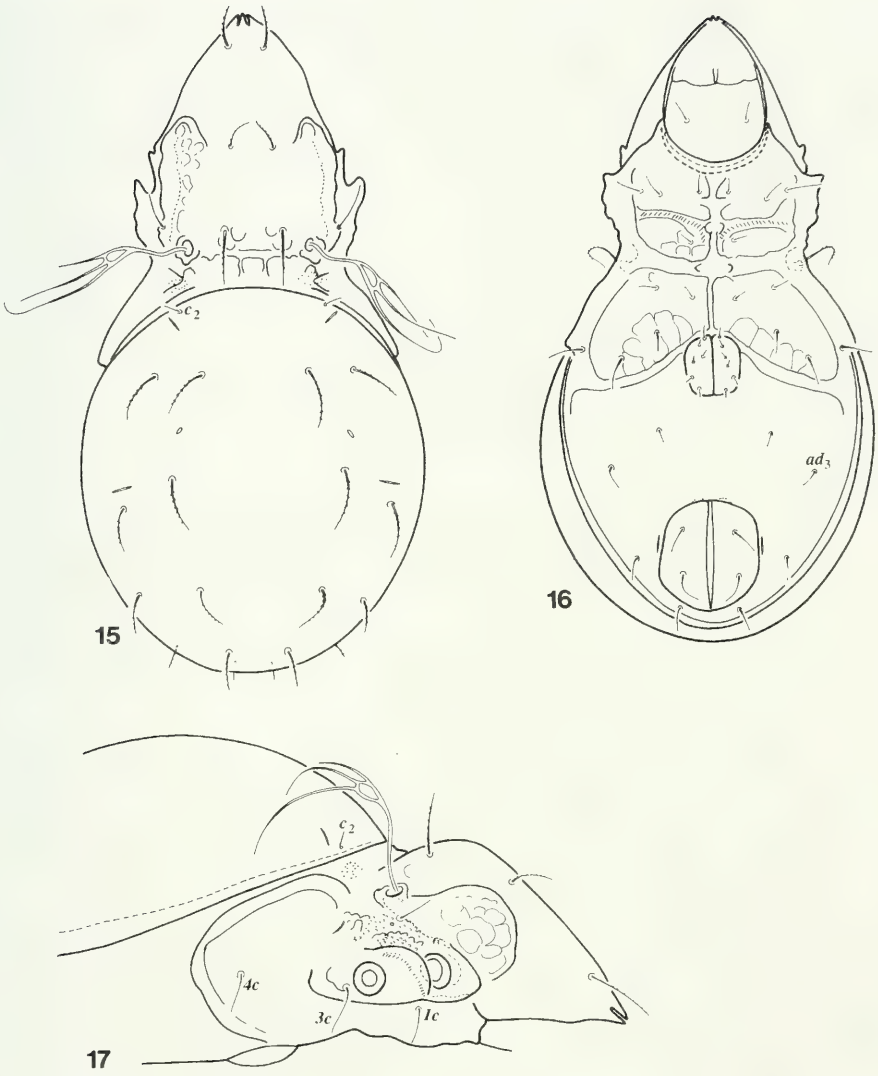
Remarks: See the remarks after the generic diagnosis.

Derivatio nominis: I dedicate the new species to my friend, Dr. B. Hauser (Museum d'histoire naturelle, Geneva), the collector of this very rich and interesting material.

Arcoppia teraja sp. n. Figs 15-17

Material examined: Brunei: Holotype: Bru-88/32, 2 paratypes: from the same sample; 2 paratypes: Bru-88/21. Holotype and 2 paratypes: MHNG, 2 paratypes (1574-PO-96): HNHM.

Measurements: Length of body: 286-297 µm; width of body: 99-109 µm.



FIGS 15-17

Arcoppia teraja sp. n. - 15: body in dorsal view, 16: body in ventral view, 17: podosoma in lateral view.

Prodorsum: Rostral apex tripartite, all three parts of equal size. The surface of prodorsum conspicuously punctate, lateral part granulate. Median costulae and transcostula completely absent, but a well developed arched lath present laterally, the exobothridial seta arising on its basal part. Basal part of the interbothridial region distinctly sclerotized, with two pairs of nearly round fields medially and some

irregular ones laterally. A pair of short crests running posteriorly in the sejugal region, there are a pair of porose areas and weak protuberances observable (Fig. 15). Ratio of the prodorsal setae *ro* = *in* > *le* = *ex*. Bothridium with a small tubercle basally; sensilli typical for the genus *Arcoppia*, having slightly dilated heads with three branches of different lengths.

Notogaster: Ten pairs of notogastral setae present, one of them (c_2) minute, the others setiform, finely ciliate.

Lateral part of podosoma (Fig. 17): Pedotecta I small, rounded anteriorly. Setae *1c* arising far from them.

Ventral region: Well sclerotized, typical for this genus. All epimeral setae simple, fine. Anogenital setal formula: 6 - 1 - 2 - 3. Anal and adanal setae subequal. Lyrifissures *iad* located near to the anal opening, in the adanal position.

Legs: Segments of legs elongated, tibia I without any processes or tubercles. Solenidia arising on the tibial surface, φ_1 and φ_2 arising near to each other. Solenidion of tibia IV very long and thin, seta *v''* on tibia IV short spiniform, on tarsus IV plumose.

Remarks: The new species is well characterised by the completely reduced median costulae, the presence of which is one of the main characters of the genus *Arcoppia* Hammer, 1962. On this basis the new species is readily distinguishable from its congeners.

Derivation nominis: Named after the village of Teraja (Brunei). Noun in apposition.

Corynoppia andulau sp. n. Figs 18-21

Material examined: Brunei: Holotype: Bru-88/21, 2 paratypes from the same sample. Holotype and 1 paratype: MHNG, 1 paratype (1575-PO-96): HNHM.

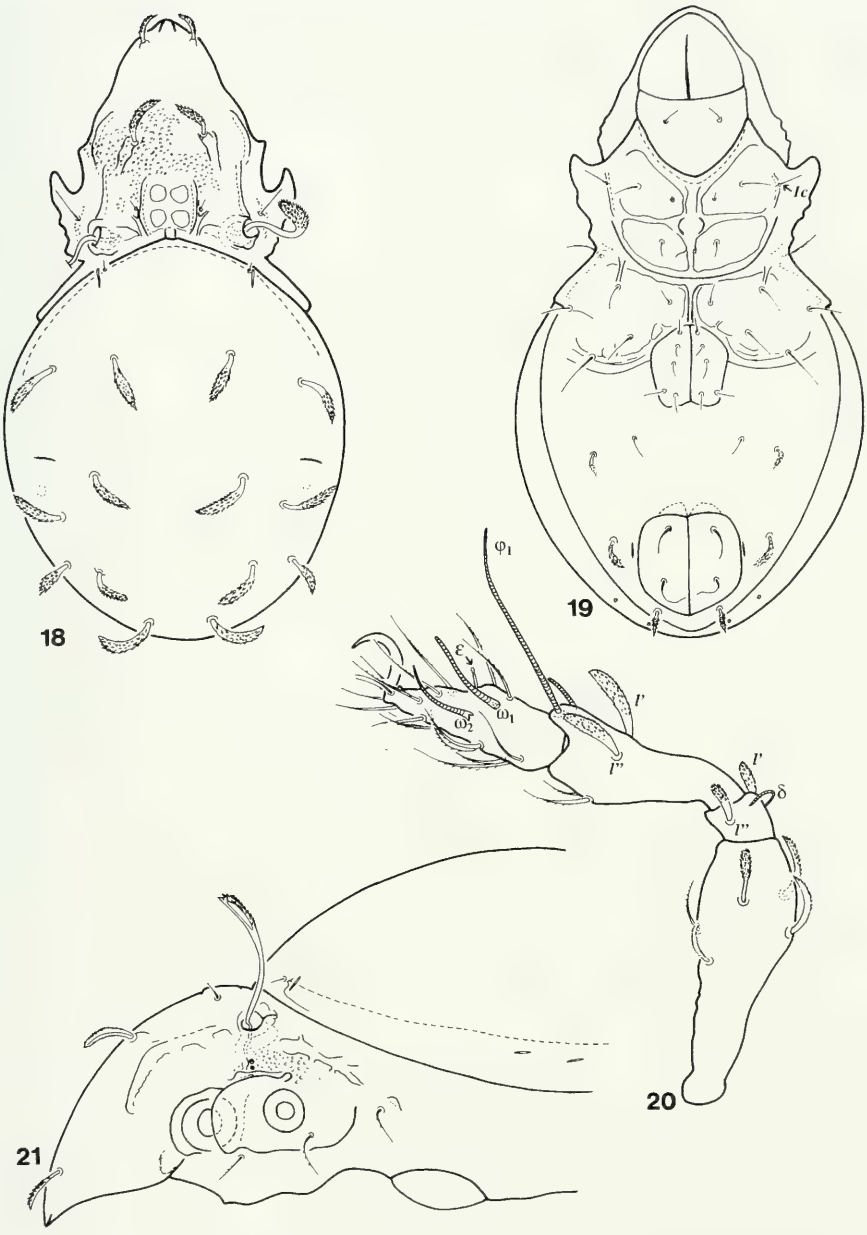
Measurements: Length of body: 252-268 µm; width of body: 138-149 µm.

Integument: A well-developed cerotegument layer covering almost the whole prodorsum, the trochanters and femora.

Prodorsum: Rostrum elongated, subtriangular, with two sharp keels near the apex. Rostral setae arising on small tubercles. Costula reduced, only a short part observable near the basis of lamellar setae. A pair of sharp crests represent the interbothridial region, two pairs of light spots are between them. Interlamellar setae arising near these crests. A pair of short lines also present medially. Interlamellar setae simple, short, exobothridial setae long. Rostral setae slightly dilated, distinctly spiculate, lamellar ones phylliform. Peduncle of sensilli curved, its dilated head spiculate.

Notogaster: A weak crista observable. Ten pairs of notogastral setae present. Setae c_2 minute, simple, all others, excepted the much smaller setae ps_2 and ps_3, nearly of equal size, dilated, nearly fusiform, distinctly spiculate. Lyrifissures *ih* and *ips* also observable.

Lateral part of podosoma: Pedotecta I rounded anteriorly, with a spur basally (Fig. 21). Exobothridial region granulated. A longitudinal lath directed posteriorly from the sejugal region.



FIGS 18-21

Corynoppia andalau sp. n. - 18: body in dorsal view, 19: body in ventral view, 20: leg I, 21: podosoma in lateral view.

Ventral region: Epimeral surfaces 1 and 2 well framed by a sharp arched line in the sejugal region, a pair of crests also present laterally, setae *1c* arising on them. Posterior border of the coxisternal region weakly developed, hardly observable at the acetabula of leg IV. All epimeral setae fine and simple. Epimeral setal formula: 3 - 1 - 3 - 3. Anogenital setal formula: 5 - 1 - 2 - 3. The genital, aggenital and anal setae simple, all three pairs of adanal setae dilated, their shape similar to the notogastral setae.

Legs: All leg segments squat. Tibia of leg I with a strong process, both solenidia arising on it (Fig. 20). Some of the leg's setae phylliform, well spiculate (e.g., setae *l* of tibia and genu I, seta *d* of femur IV, setae *d* and *l'* of genu IV and seta *v"* of tarsus IV). All solenidia slightly blunt at tip, mostly short (e.g., φ_1 of tibia II, III and IV), eupathidium ϵ far removed from both solenidia of tarsus I.

Remarks: All species of the genus *Corynoppia* Balogh, 1983 previously described are only known from the Palaearctic and Neotropical Region. The new species stands near to them, distinguished by its elongated rostrum with two short keels, the surface of the prodorsum (except for an interbothridial field) which is distinctly granulated, and the sensilli shorter and wider than in the other species.

Derivatio nominis: Named after the Forest Reserve Andalau. Noun in apposition.

Karenella bruneiana sp. n. Figs 22-26

Material examined: Brunei: Holotype: Bru-88/21, 2 paratypes from the same sample; 5 paratypes: Bru-88/46. Holotype and 4 paratypes: MHNG, 3 paratypes (1576-PO-96): HNHM.

Measurements: Length of body 495-520 µm; width of body: 313-322 µm.

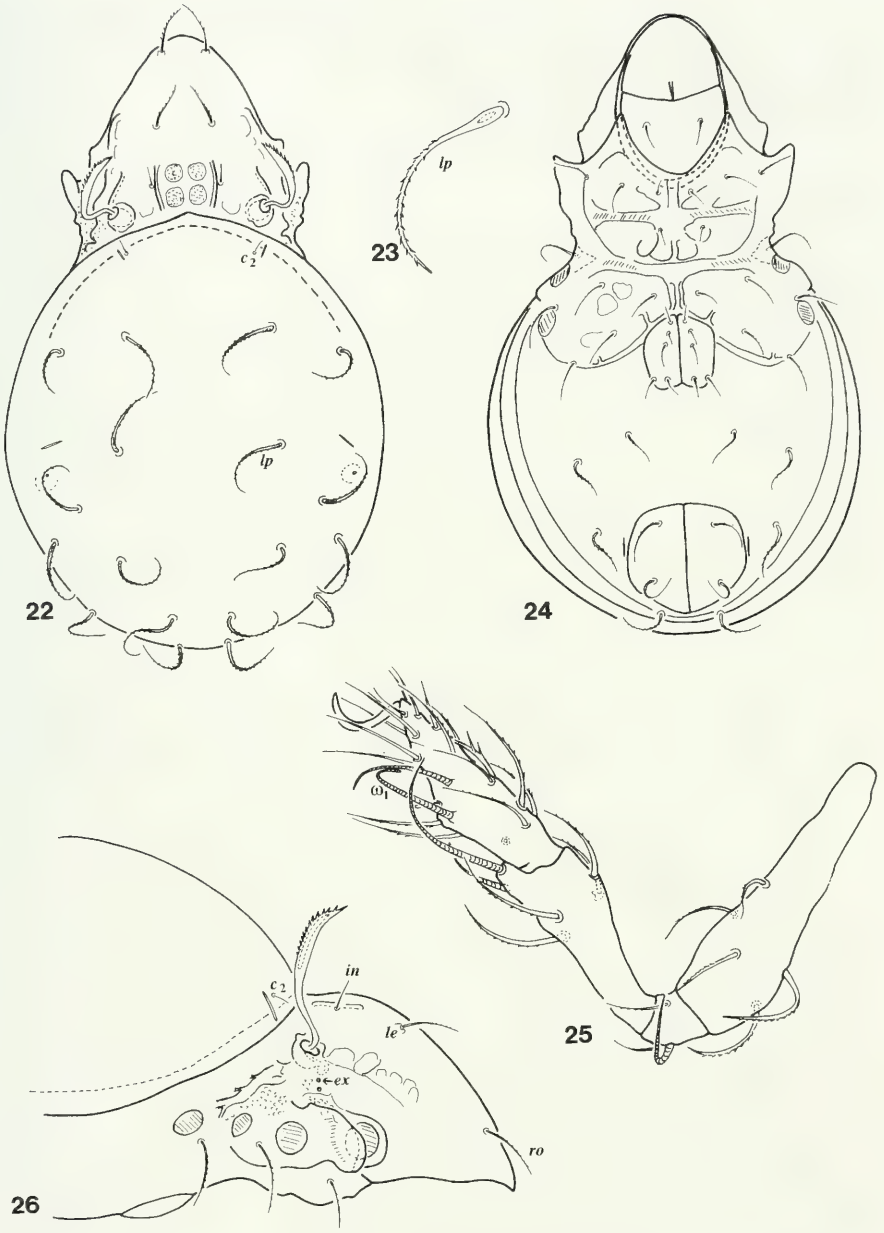
Prodorsum: Rostral apex very widely rounded, rostral setae arising on prodorsal surface. Neither costula nor lamellar line present, but a pair of typical and conspicuous interbothridial crests instead (Fig. 22), in between them two pairs of spots. Ratio of prodorsal setae *ro* > *le* > *in* > *ex*, the latter pair represented only by their alveoli, setae *ro* and *le* finely ciliated. Sensilli asymmetrically fusiform, with spicules on their distal half. Exobothridial region slightly granulate.

Notogaster: Anterior margin of notogaster convex. Ten pairs of characteristic notogastral setae (Fig. 23) present, setae c_2 minute, all others dilated basally, blunt at tip, comparatively long and well ciliated.

Lateral part of podosoma: A strong lath running from the bothridium posteriorly, the surface between it and the acetabula is mostly granulated (Fig. 26).

Ventral region: Coxisternal region well sclerotized. Epimeres 1 and 2 well separated from each other, borders 4 are weaker than the others, narrowing laterally. Epimeral surface ornamented by some irregular fields. Epimeral setal formula is typical for the genus, setae *1c* arising far from pedotecta I (Fig. 24). Adanal setae are similar to the notogastral ones, all others in the ventral plate are fine and somewhat roughend. Lyrifissures *iad* in adanal position.

Legs: Tibia of leg I (Fig. 25) with a strong process bearing two solenidia. Solenidion ω_1 strongly arched backwards and inwards. All femora and trochanter IV conspicuously long, the chaetom of all legs typical for the family.



FIGS 22-26

Karenella bruneiana sp. n. - 22: body in dorsal view, 23: seta *lp* of notogaster, 24: body in ventral view, 25: leg I, 26: podosoma in lateral view.

Remarks: The species of the genus *Karenella* Hammer, 1962 have been surveyed by Subias & Balogh (1989). The new species is clearly distinguished from those previously known by the form and length of the notogastral setae and by the gradually narrowing epimeral borders 4.

Derivatio nominis: Named after the country of its origin.

Ptiloppia lienhardi sp. n. Figs 27-30

Material examined: Holotype: Bru-88/21, 8 paratypes from the same sample; 4 paratypes: Bru-88/32; 13 paratypes: Bru-88/35. Holotype and 16 paratypes: MHNG, 9 paratypes (1577-PO-96): HNHM.

Measurements: Length of body: 213-239 µm; width of body: 109-124 µm.

Prodorsum: Rostrum tripartite, median apex also divided (Fig. 27). Rostral setae simple and smooth, arising on the prodorsal surface behind the apex. A pair of arched and narrow costulae present, with a shorter and also arched subcostula laterobasally; between them a pair of longitudinal tubercles visible. Lateral part of prodorsum granulated, some smaller granules observable along the distal part of the costulae (Fig. 30). The very short lamellar setae arise on the distal end of the costulae. Comparatively long interlamellar setae visible lateral to the tubercles. Exobothridial setae longer than the rostral or interlamellar ones. Bothridium well sclerotized, with a rounded basal protuberance. Sensilli very long, with dilated head bearing 6-7 long branches.

Notogaster: Anterior region of notogaster narrowing, no true crista discernible. Only seven pairs of notogastral setae present (I was not able to see either true setae or the alveoli of setae h_1- h_3). Setae c_2 very short, spiniform, setae *la* and *lm* long, with capitate distal ends (Fig. 27, 30).

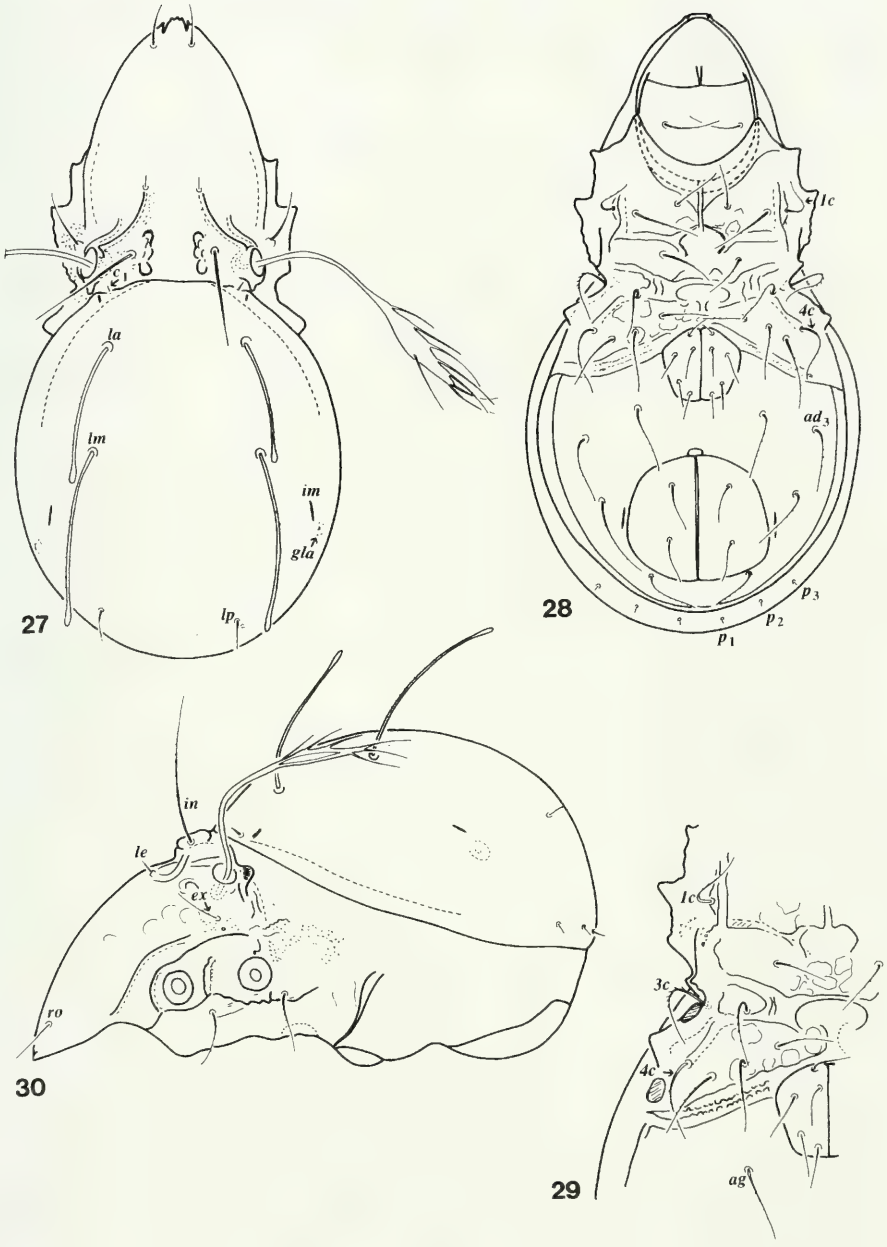
Lateral part of podosoma: Pedotecta I and II-III very small, crest-like. Exobothridial setae arising on small tubercles.

Coxisternal region: Epimeral borders well developed, *bo.* 2 and *bo. sej.* comprising foramen-like structures medially (Fig. 29), *bo.* 4 broad, with granules in its median hollow. All epimeral setae conspicuously long, most of them finely ciliated. Setae *1c* stand far from pedotecta I, setae *4c* also arising far from the pedotecta, inserted at the end of a lath. Epimeral setal formula: 3 - 1 - 3 - 3.

Anogenital region: All setae of this region also long. Anogenital setal formula: 5 - 1 - 2 - 3. Setae ad_3 originating far anteriorly and laterally from the anal aperture. Lyrifissures *iad* located in the adanal position.

Legs: All leg segments, primarily femora, tibiae and tarsi of leg III and IV elongated, long or very long. Tibia of leg I without tubercle, solenidion φ_1 very long, φ_1 on tibia IV also long and flagellate. Solenidion of genu of leg III short, fusiformly dilated.

Remarks: The rostrum, the prodorsal and ventral structures and some other features (e.g., reduction of the notogastral setae) of the new species are similar to those of *Oppiella bulanovae* Hammer, 1968, the type species of the genus *Ptiloppia* Balogh, 1983. However, the form of the notogastral setae is quite different.



FIGS 27-30

Ptiloppia lienhardi sp. n. - 27: body in dorsal view, 28: body in ventral view, 29: coxisternal region, 30: body in lateral view.

Derivatio nominis: I dedicate the new species to Dr. C. Lienhard (Muséum d'histoire naturelle, Geneva) for his help to Dr. B. Hauser during field trips in the tropics and for his help in correcting my manuscripts.

Senectoppia kerangas sp. n. Figs 31-33

Material examined: Brunei: Holotype: Brun-88/35, 1 paratype from the same sample. Holotype: MHNG, paratype (1578-P0-96): HNHM.

Measurements: Length of body: 341-372 µm; width of body: 198-213 µm.

Prodorsum: Rostrum elongated. Costulae well developed, not connected by transversal ridges. Two pairs of punctate and irregular interbothridial fields present. Bothridium with basal tubercle. Sensilli very long, pectinate, their 6 (7) branches different in length. Ratio of the prodorsal setae: *ro* > *le* > *in* = *ex* (Fig. 33).

Notogaster: Anterior region of notogaster narrowing. A pair of well-developed humeral processes present, the minute setae c_2 and lyrifissures *ia* observable. Among the other nine pairs of setae, four pairs arising in longitudinal rows and of nearly equal length, the others being much shorter; the four median pairs finely ciliate. Lyrifissures *ih* and *ips* located very near to each other, observable only in lateral view.

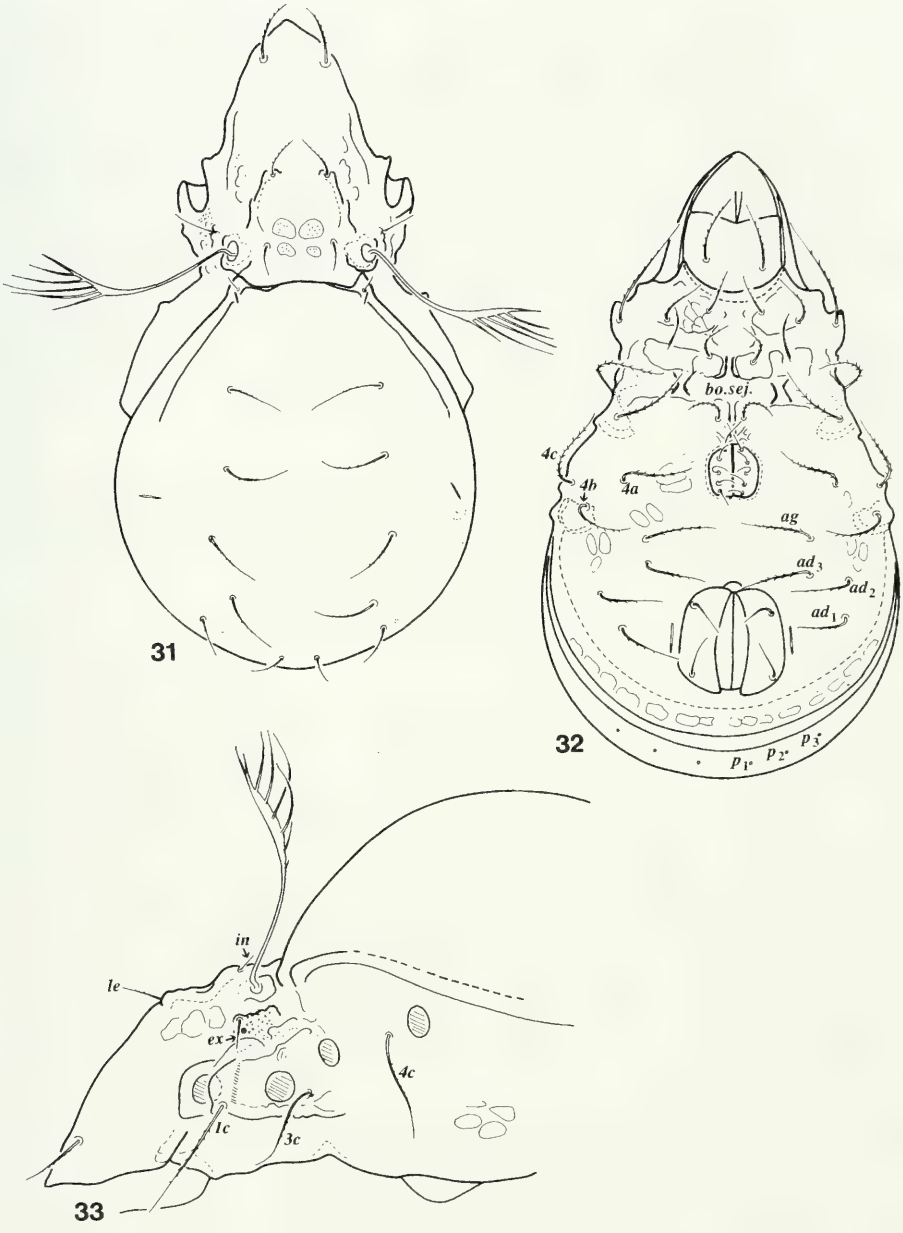
Lateral part of podosoma: Anterior part of this region well sclerotized, with some laths, the surface partly granulated (Fig. 33). Pedotecta I small, pedotecta II-III reduced.

Ventral region: Anterior part of the coxisternal region well sclerotized, among the epimeral borders *bo.* 2 and *bo. sej.* broad, with longitudinal ponticular crests. Epimeral surface with an irregular polygonate sculpture. Posterior part weakly sclerotized, *bo.* 3 and *bo.* 4 completely reduced, a weak sternal border and only some irregular fields observable in this part (Fig. 32). All epimeral setae very long and characteristically pilose, setae *1c* the longest of all. Ventral plate with some irregular fields behind the acetabula of legs IV. Genital aperture very small, six pairs of smooth setae arising on the genital plates (one pair difficult to see). The anterior setae much longer than the others. Aggenital setae with long cilia, adanal setae arising in paraanal and preanal position, only with short cilia. The distance between setae ad_1 and ad_2 equal to the distance between setae ad_2 and ad_3. Lyrifissures iad conspicuously long.

Legs: All segments of legs very long and narrow. Tibia of leg I without process. ϵ on tarsus I removed to the posterior part of the segment, behind the solenidion ω_1. Seta *v*" of tarsus IV plumose.

Remarks: Based on the shape of the sensilli and on the presence or absence of the characteristic sculpture of the notogaster, the species of *Senectoppia* Aoki, 1967 may be divided into two groups (Aoki, 1983). The sensilli of the new species are pectinate, the notogaster has no sculpture. Therefore it is very close to *S. pectinata* Aoki, 1983, however, the new species differs from it by the ratio of the prodorsal setae (setae *in* are the longest prodorsal setae in *S. pectinata*), by the length of the sensillar branches (shorter in *S. pectinata*), the number of the notogastral setae (c_2 absent in *S. pectinata*) and primarily by the absence of a strong epimeral border *bo.* 4 (present in *S. pectinata*) and by the position of the adanal setae.

Derivatio nominis: Named after the tropical heath forest "Kerangas". Noun in apposition.



FIGS 31-33

Senectoppia kerangas sp. n. - 31: body in dorsal view, 32: body in ventral view, 33: podosoma in lateral view.

Bruneibelba gen. n.

Diagnosis: Belonging to the family Suctobelbidae. Rostrum wide, its apex rounded, with 2-3 pairs of lateral teeth. Rostral setae simply geniculate. Tectopedial field present, lamellar knob divided into two parts fused with the interbothridial crests. Lamellar setae conspicuously long, arising on the distal tubercles. Sensilli long, directed outwards, with a rounded head. Anterior margin of notogaster with two pairs of condyles. Light median spot placed on a protuberance. Nine pairs of foliate notogastral setae. Gnathosoma typical for the family, palpal eupathidia fused, palpal solenidium very long. Palpal setal formula: 1 - 0 - 2 -7+1. Coxisternal region with a pair of large lobes near the genital opening. Discidium with a wide transversal crest. Four pairs of genital, one pair of aggenital, two pairs of anal and three pairs of adanal setae present, setae ad_1 in adanal, setae ad_3 in preanal position. Legs are typical for the family.

Type species: *Bruneibelba separata* sp. n.

Remarks: The new taxon differs from the heretofore known genera of Suctobelbidae by its divided lamellar knob, by the large tubercles in the coxisternal region and by the 4 pairs of genital setae. This combination of features was hitherto unknown in the family.

Derivatio nominis: Named after the country of origin.

Bruneibelba separata sp. n. Figs 34-37

Material examined: Brunei: Holotype: Bru-88/35, 5 paratypes from the same sample; 3 paratypes: Bru-88/21. Holotype and 5 paratypes: MHNG, 3 paratypes (1579-PO-96): HNHM.

Measurements: Length of body: 198-209 µm; width of body: 106-117 µm.

Prodorsum: Rostral apex rounded, with 2-3 rostral teeth. Whole prodorsal surface bearing tubercles. Bothridium with large basal tubercles. Peduncle of the sensilli long, its head elongate, smooth, sometimes with a narrow, divided velum.

Notogaster (Fig. 34): Both pairs of notogastral condyles conspicuously developed, with long cristae directed backwards. Nine pairs of notogastral setae present, all setae lanceolate, except for setae p_2.

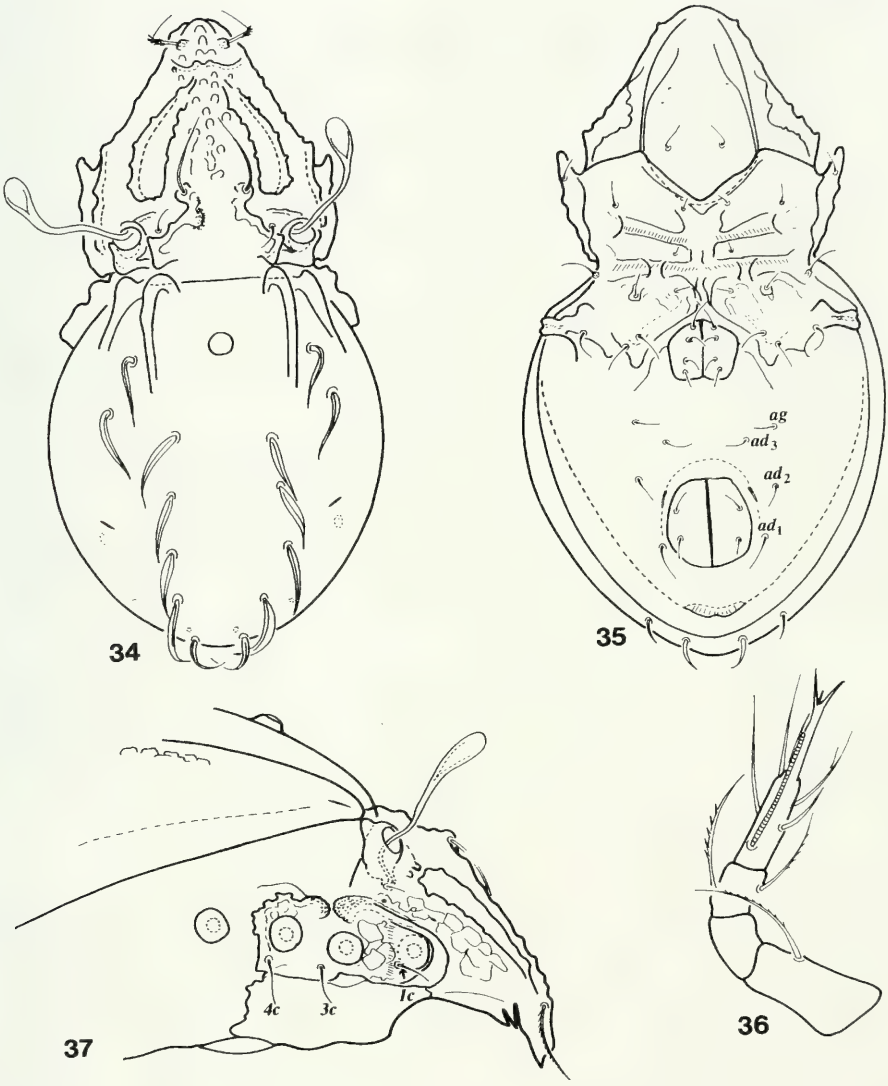
Lateral part of podosoma: Well ornamented by a polygonal sculpture (Fig. 37). Longitudinal lath in exobothridial region well granulate, opposite to it a similar tubercle in the sejugal region.

Ventral region (Fig. 35): Epimeral surface (except for epimeres 3-4) smooth, only a weak polygonal pattern observable on the last one. Basal lobus on the epimeral border 4 slightly protruding from the surface. Epimeral setae simple, setae *1c* arising laterally. Anogenital setal formula: 4 - 1 - 2 - 3. Adanal setae typical for the family, ad_1 in paraanal, ad_3 in preanal position, ad_3 stand conspicuously near to the aggenital setae. Behind the anal opening, a short undulate thickening observable.

Legs: Typical for the family.

Remarks: See after *Bruneibelba tuberosa* sp. n..

Derivatio nominis: Named after the shape of the structures in the lamellar region.



FIGS 34-37

Bruneibelba separata gen. n., sp. n. - 34: body in dorsal view, 35: body in ventral view, 36: palp, 37: podosoma in lateral view.

Bruneibelba tuberosa sp. n Figs 38-41

Material examined: Holotype: Brun-88/35, 3 paratypes from the same sample. Holotype and 2 paratypes: MHNG, 1 paratype (1580-PO-96): MHNG.

Measurements: Length of body: 173-184 µm; width of body: 96-106 µm.

Prodorsum: Rostral apex rounded, with 2 large, rounded rostral teeth (Fig. 39). Whole prodorsal surface bearing tubercles. Bothridium with large basal tubercles. Peduncle of the sensilli long, its head truncate, with a conspicuously spiculate velum.

Notogaster (Fig. 38): Both pairs of notogastral condyles conspicuously developed, with long cristae directed backwards. Median condyles wide, blunt at tip. Light median spot protruding. Nine pairs of notogastral setae present, slightly shorter than in the preceding species, all setae lanceolate, except for setae p_2.

Lateral part of podosoma: Well ornamented by polygonal sculpture, granules and tubercles (Fig. 41). Longitudinal lath in exobothridial region distinctly granulated, opposite to a similar tubercle in the sejugal region.

Ventral region (Fig. 40): Epimeral surface with only a slight polygonal pattern. Basal lobus on the epimeral border 4 slightly protruding from the surface. A conspicuous lath present behind this lobe, directed posteriorly. Epimeral setae simple, setae *1c* arising laterally. Anogenital setal formula: 4 - 1 - 2 - 3. Adanal setae typical for the family, setae ad_1 in paraanal, ad_3 in preanal position, ad_3 stand very near to the aggenital setae.

Legs: Typical for the family.

Remarks: The two species of the new genus can be separated by the size of the rostral teeth (sharply pointed, narrow in *B. separata*; large, rounded in *B. tuberosa*), and by the form of the sensilli (smooth marginally in *B. separata*; with a spiculate velum in *B. tuberosa*).

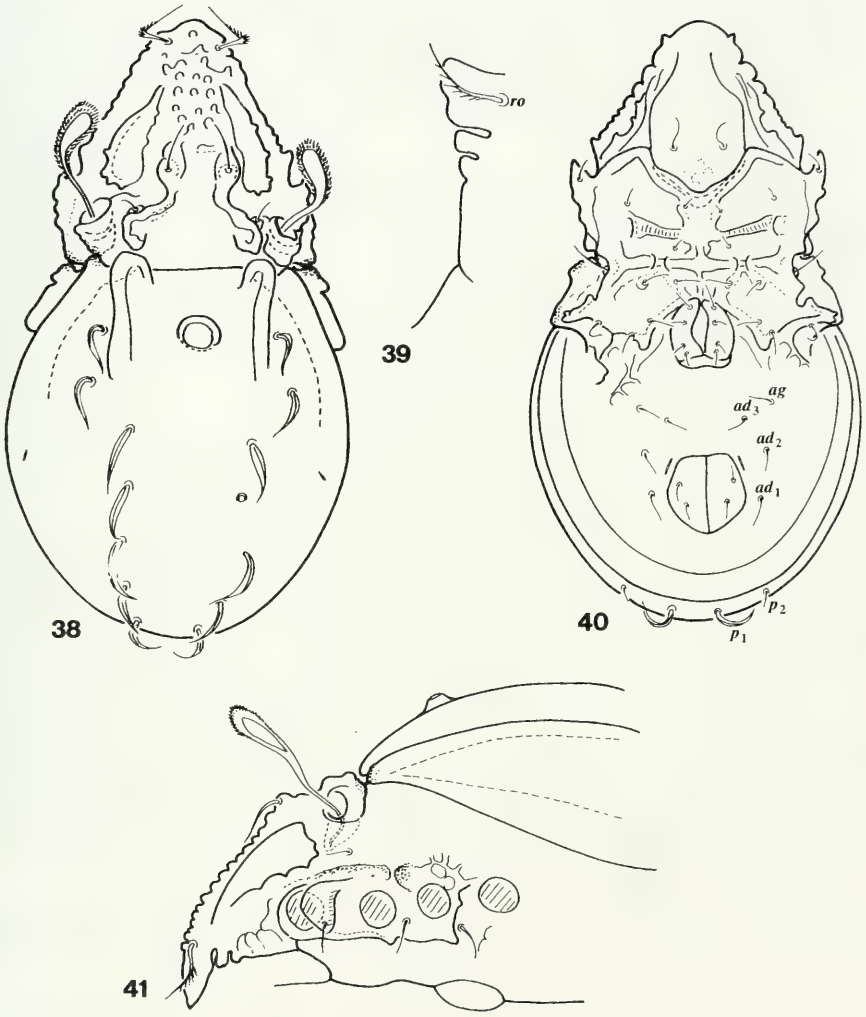
Derivatio nominis: Named after the sculpture of the prodorsum.

Coartobelba gen. n.

Diagnosis: Belonging to the family Suctobelbidae. Sejugal region of the body strongly narrowing in lateral view. Rostral apex wide, with one pair of large lateral teeth. Tectopedial field and lamellar knob present, all basal structures absent. Rostral setae geniculate, lamellar setae arising on the lamellar knob, interlamellar setae located laterally, very near to the bothridia. Peduncle of the sensilli conspicuously long, directed anteriorly. Dorsosejugal suture partly absent, anterior margin of notogaster with one pair of very large lateral condyles. Nine pairs of notogastral setae present. Coxisternal region simple, without tubercles or ponticular structures. Epimeral borders 4 very characteristic, forming a continuous sharp line (Fig. 44). Anogenital setal formula: 4 - 1- 2 - 3, adanal setae in typical position. Gnathosoma and legs typical for the family.

Type species: *Coartobelba pauper* sp. n.

Remarks: The new species is unique in the family by the strongly narrowing regio sejugalis and by the absence of the basal structures of the prodorsum. The



FIGS 38-41

Bruneibelba tuberosa gen. n., sp. n. - 38: body in dorsal view, 39: teeth of rostrum, 40: body in ventral view, 41: podosoma in lateral view.

conspicuous, undulate posterior border of the coxisternal region is also unknown in related taxa. *Suctobelba campestris* Balogh & Mahunka, 1981 = *Coartobelba campestris* (Balogh & Mahunka) comb. n. from Paraguay also belongs to this genus.

Derivatio nominis: Named after the dorso-ventrally strongly flattened body.

Coartobelba pauper sp. n Figs 42-46

Material examined: Brunei: Holotype: Bru-88/46, 4 paratypes from the same sample; 2 paratypes: Bru-88/21; 5 paratypes: Bru-88/29; 1 paratype: Bru-88/41. Holotype and 7 paratypes: MHNG, 5 paratypes (1581-PO-96): HNHM.

Measurements: Length of body: 208-221 µm; width of body: 113-120 µm.

Prodorsum: Rostral apex slightly nasiform, behind it a pair of wide lobes and a pair of sharp, large teeth, directed forwards (Fig. 43). Some tubercles present in the rostral part of the prodorsum. Tectopedial fields located near to each other. Lamellar knob large, bulbiform. Interbothridial part of prodorsum broad, some light fields present basally, but neither the costuliform structures nor other crests present. Interlamellar setae arising in an unusual position, near to the bothridium. The head of the sensilli asymmetrically lanceolate, with some spicules laterally.

Notogaster: Lateral condyles sharply pointed, directed forwards, very long (Fig. 46). Dorsosejugal suture thin. Nine pairs of short, simple notogastral setae present, no essential differences between them (Fig. 42).

Lateral part of podosoma: A well-developed, granulate longitudinal lath and a similarly granulate, large tubercle present in the sejugal region (Fig. 45).

Ventral region (Fig. 44): Shape of gnathosoma (chelicerae, palps) typical for the family. Palpal setal formula: 1 - 0 - 2 - 7+1. Eupathidia fused, typically furcate. Palpal solenidium very long. Epimeral borders of the coxisternal region well-developed; the longitudinal, sternal borders also continuous (Fig. 44). All epimeral setae short and simple. Setae of the ventral plate also simple, aggenital setae arising very far from each other, much further than from the anterior adanal setae (ad_3).

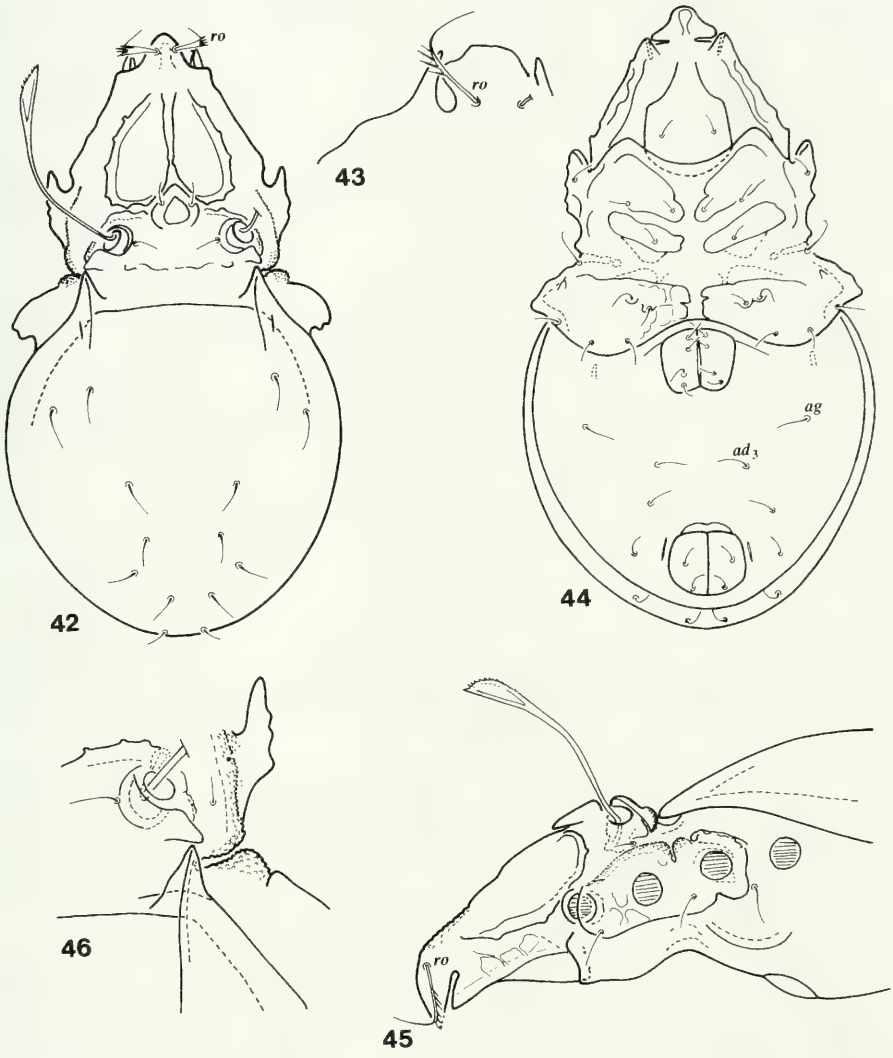
Legs: Their size and chaetotaxy typical for the family. Solenidion ω_1 long, but reaching only to the basis of the claw. Solenidia φ_1 and φ_2 very long and flagellate. Setae *v*" and *a*" strongly dilated, *v*" phylliform, well-pilose.

Remarks: See the remarks after the description of the new genus.

Derivatio nominis: Named after the missing structures of the prodorsum.

Condylobelba gen. n.

Diagnosis: Belonging to the family Suctobelbidae. Prodorsum with a broadened, wide rostrum and 4-5 large, mostly serrated pairs of lateral teeth. Behind the rostrum a transversal lath present, the geniculate rostral setae arising on it. Tectopedial fields and lamellar knob normally developed. Bothridium with basal tubercles. Anterior margin of notogaster with two pairs of condyles with crista, between them an unpaired, anteriorly rounded condylus present. At least the latter structure distinctly protruding from the notogastral surface. Nine pairs of notogastral setae present. Mentum and chelicerae typical for the family, palpal setal formula 2 - 0 - 2 - 7+1.



FIGS 42-46

Coartobelba pauper gen. n., sp. n. - 42: body in dorsal view, 43: rostral apex, 44: body in ventral view, 45: podosoma in lateral view, 46: bothridial region and lateral condyle of notogaster.

Distal eupathidia of palpal tarsus fused, furcate, solenidium long. Lateral region of podosoma and coxisternal region similar to that of the other taxa in the family. Four or five pairs of genital, one pair of aggenital, two pairs of anal and three pairs of adanal setae present. Setae ad_1 in paraanal position and ad_3 in preanal position, the latter always far anteriorly. Lyrifissures *iad* stand near to the anal aperture. Size and chaetotaxy of the legs typical for the family. Solenidia φ_2 and ω_1 of leg I peculiarly long, solenidion φ_2 on tibia IV short and blunt at tip, two setae on tarsus IV slightly dilated or spinose.

Type species: *Condylobelba agathis* sp. n

Remarks: In all so far known genera of the family Suctobelbidae condyles are either missing or appear in pairs (1 or 2 pairs) on the anterior margin of the notogaster. The unpaired, median condyle is characteristic for this new genus. Apart from this striking feature, the new genus may also be characterized by the extraordinarily broad rostral apex, the transverse lath behind it bearing rostral setae, the 3-4 conspicuously large lateral teeth and the less than 6 pairs of genital setae. This combination of features is entirely unknown in any of the genera belonging to the family of Suctobelbidae. In addition to the type-species two further new species are described below.

Derivatio nominis: Named after the condylar structure of the notogaster.

Condylobelba agathis sp. n Figs 47-51

Material examined: Brunei: Holotype: Bru-88/35, 13 paratypes from the same sample; 2 paratypes: Bru-88/21; 1 paratype: Bru-88/29; 1 paratype: Bru-88/46. Holotype and 11 paratypes: MHNG, 6 paratypes (1 582-PO-96): HNHM.

Measurements: Length of body: 163-179 µm; width of body: 82-89 µm.

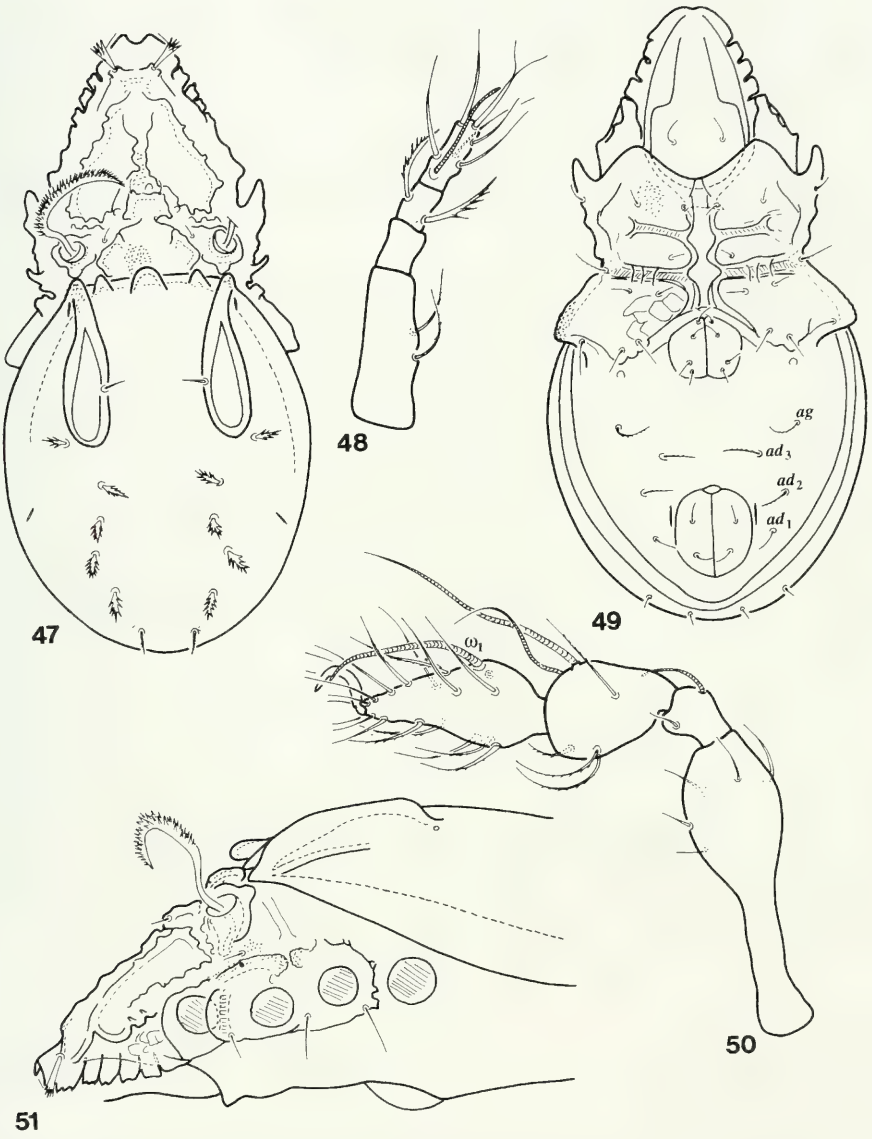
Prodorsum: Nearly the whole surface granulated. Rostral apex concave medially, with 2-3 sharp teeth on both sides laterally. Behind the deep apical incisure, 3-4 very large, partly serrated lateral teeth present. Tectopedial field wide, lamellar knob also wide, anterior margin nearly straight with two small lateral tubercles. Sensilli narrow, falciform, distinctly barbed, directed inwards.

Notogaster (Fig. 47): Apices of the lateral condyles granulated, continuing into long cristae forming teardrop-shaped structures. The unpaired rounded condyles being the largest of all, standing isolated without any sculpture. All condyles and the guttiform structures distinctly protruding from the notogastral surface. Nine pairs of notogastral setae present, five pairs dilated, strobiliform, the others spinifonn.

Lateral part of podosoma (Fig. 5 1): Pedotecta I small, seta *1c* arising on its basal margin. Exobothridial region granulated.

Ventral region (Fig. 49): All epimeral surfaces granulate, except for the median (sternal) field. A weak polygonal design also observable. Epimeral setae simple, setae *1c* arising laterally. Anogenital setal formula: 4 - 1 - 2 - 3. Adanal setae arising in typical position for the family, ad_1 paraanal.

Legs: Size and chaetotaxy of the legs typical for the family. Solenidion φ_1 of leg I (Fig. 50) long, fine, flagellate, ω_1 also long, reaching beyond the basis of the claw. Solenidion φ_1 of tibia IV short, conspicuously bent. Setae *v'* and *v''* pennate, slightly dilated distally.



FIGS 47-51

Condylobelba agathis gen. n., sp. n. - 47: body in dorsal view, 48: palp, 49: body in ventral view, 50: leg I, 51: podosoma in lateral view.

Remarks: See after *Condylobelba sculpturata* sp. n..

Derivatio nominis: Named after the *Agathis damara* (Araucariaceae) forest in Brunei, the unique natural monoculture of this species.

Condylobelba bruneiensis sp. n. Figs 52-54

Material examined: Brunei: Holotype: Bru-88/35, 3 paratypes from the same sample; 2 paratypes: Bru-88/21; 5 paratypes: Bru-88/24; 1 paratype: Bru-88/29; 2 paratypes: Bru-88/41; 1 paratype: Bru-88/46. Holotype and 12 paratypes: MHNG, 4 paratypes (1583-PO-96): HNHM.

Measurements: Length of body: 171-179 µm; width of body: 87-93 µm.

Prodorsum: Rostral apex rounded or straight medially, with a conspicuous transversal lath behind it. Nearly the whole prodorsal surface granulated, some individual tubercles also observable between the tectopedial fields or the lamellar knob. Margins of this last structure undulate. Bothridium with large basal tubercles, head of the sensilli distinctly dilated, with a spiculate dorsal surface.

Notogaster: All condyles of the notogastral margin well-developed, cristae running posteriorly from both lateral pairs. Median cristae interconnected posteriorly, forming a semicircular structure (Fig. 52). Median unpaired condyle very large, also semicircular. Nine pairs of notogastral setae present, all dilated, mostly wide, phylliform, except for p_2 which is only slightly spiculate. The median five pairs (*lp*, h_1-h_2, p_1) larger than the others. Some granules arranged longitudinally around the insertion of the median notogastral setae.

Lateral part of podosoma: Exobothridial region conspicuously granulated. Pedotecta I semicircular, seta *1c* arising on its margin.

Ventral region (Fig. 53): Surface of epimere 1 finely granulated, on the other epimeres only a weak polygonal pattern observable. Epimere 3-4 divided by a comparatively strong longitudinal lath. Epimeral setal formula: 3 - 1 - 3 - 3. All setae fine and simple. A well-developed lateral tooth present opposite to the epimeral borders 4. Anogenital setal formula: 4 - 1 - 2 - 3. Two pairs of adanal setae (ad_2 and ad_3) arising in preanal position; lyrifissures iad in paraanal position.

Remarks: See after *Condylobelba sculpturata* sp. n.

Derivatio nominis: Named after the country of origin.

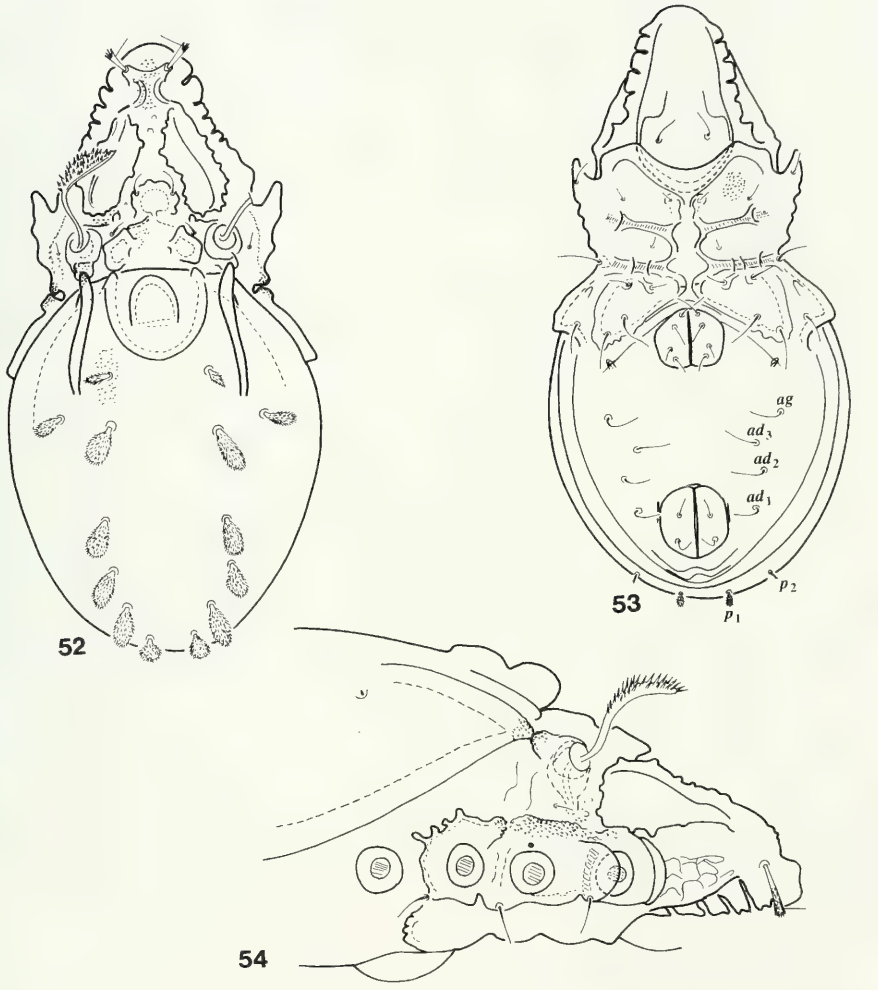
Condylobelba sculpturata sp. n. Figs 55-57

Material examined: Brunei: Holotype: Bru-88/35. Holotype: MHNG.

Measurements: Length of body: 211 µm; width of body: 122 µm.

Prodorsum: Rostrum wide, its anterior margin slightly concave, surface granulated. Behind the rostrum a typical transversal crest present, bearing the geniculate rostral setae. Tectopedial fields wide, their margins well-developed, between them some tubercles visible. Lamellar knob without median apex, its anterior margin nearly straight. Bothridium with a basal knob, sensilli bent inwards, with a dilated, approximately lanceolate and distinctly spiculate head.

Notogaster: The number and the size of the dorsosejugal condyles typical for the genus, both pairs of the lateral condyles continuing into long cristae. Notogastral



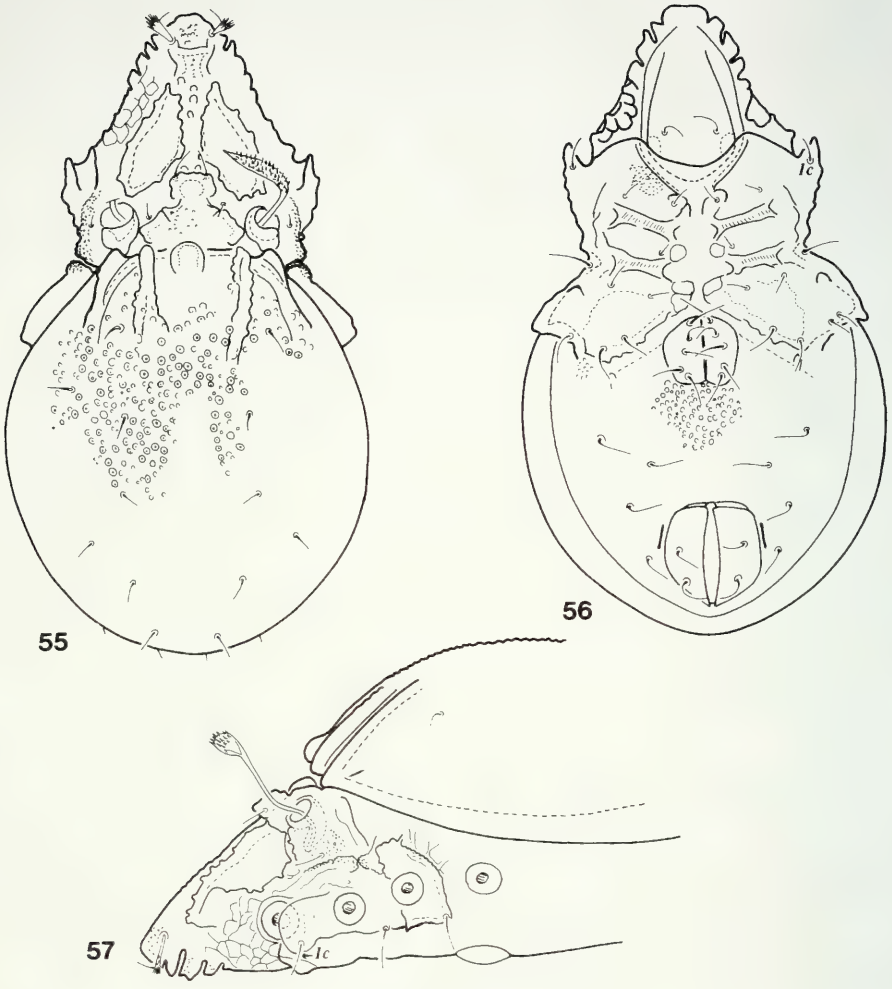
FIGS 52-54

Condylobelba bruneiensis gen. n., sp. n. - 52: body in dorsal view, 53: body in ventral view, 54: podosoma in lateral view.

surface (except for an anteromedian and a median part) covered by simple tubercles, mixed with ocellate pustules (Fig. 55). The nine pairs of notogastral setae short, simple, slightly dilated basally.

Lateral part of podosoma: Exobothridial region distinctly granulated. Pedotecta I large, with a rounded basal lobe, setae *1c* arising on it (Fig. 57).

Ventral region (Fig. 56): Epimeral surface (except for the median [sternal] field) covered by small granules, ventral plate with larger granules but without



FIGS 55-57

Condylobelba sculpturata gen. n., sp. n. - 55: body in dorsal view, 56: body in ventral view, 57: podosoma in lateral view.

ocellate formation. All epimeral setae short and simple, epimeral setal formula: 3 - 1 - 3 - 3(4). Five pairs of genital setae. The other setae on ventral plate in typical position, setae ad_1 arising in paraanal position.

Legs: Surface of all segments granulated. Their sizes and chaetotaxy typical for the family. Seta *v'* and *a'* slightly plumose.

Remarks: The three species of the new genus can be distinguished by using the following key:

1 Notogastral setae simple, notogastral surface ornamented with protruding granules or tubercles ..... *C. sculpturata* sp. n.
– Notogastral setae modified, strobiliform or phylliform; notogastral surface smooth 2
2 Cristae of the lateral notogastral condyles forming teardrop-shaped loops; notogastral setae strobiliform ..... *C. agathis* sp. n.
– Only one crista extending from lateral notogastral condyles; notogastral setae phylliform. ..... *C. bruneiensis* sp. n.

Derivatio nominis: Named after the sculpture of the notogaster.

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